Serial No.: 10/018,662

In the claims:

Claim 1 (cancelled).

Claim 2 (cancelled).

Claim 3 (cancelled).

Claim 4 (cancelled).

Claim 5 (cancelled).

Claim 6 (cancelled).

Claim 7 (cancelled).

Claim 8 (cancelled).

Claim 9 (cancelled).

Claim 10 (cancelled).

Claim 11 (cancelled).

Claim 12 (cancelled).

Claim 13 (cancelled).

Claim 14 (cancelled).

Claim 15 (cancelled).

Claim 16 (cancelled).

Claim 17 (cancelled).

18. (Currently amended) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology comprising a) semiconductor layers made of III-V compounds, b) means for providing luminous power densities greater than 1 W/cm^2, and c) a size ~~is~~ in the range of 0.1 to 100 square millimeters, wherein the definition of numerous said photovoltaic converters on a same semiconductor wafer is provided by photolithography, as well as for the shape of a

frontal grid on each of the photovoltaic converters, and the separation of the converters on the same semiconductor wafer is carried out by sawing or by cutting with a point or cleaving or by other cutting techniques.

19. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 wherein a substrate over which the photovoltaic converter is grown is one of a III-V semiconductor, another semiconductor as germanium or silicon, or a non-semiconductor substrate as ceramic or glass.
20. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 wherein it transforms a cone of incident light with a given spectrum and coming from a medium with any refraction index into electrical energy.
21. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 configured for its use in photovoltaic solar energy applications, for which a particular spectrum comes from the sun and in which the device is assembled to an optical concentrator which increases the luminous intensity coming from the sun.
22. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 wherein the photovoltaic converter device is assembled to an optical concentrator by means of silicone rubber, epoxy, resins or other paste, glue or primer.
23. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 for producing electrical energy from heat sources and whose particular spectrum is, mainly, infrared.
24. (Cancelled)
25. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 adapted for carrying out conversion of light channeled by optical fiber and coming from a laser into electricity for high-risk environments.

26. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 which has been encapsulated by means of optoelectronic techniques.
27. (Currently amended) A high ~~High~~ efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 wherein the device consists of a single semiconductor junction.
28. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 wherein the device consists of several semiconductor junctions.
29. (Previously presented) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 possessing a monolithic connection in series in order to increase the output voltage.
30. (Cancelled)
31. (Cancelled)
32. (Cancelled)
33. (Cancelled)
34. (Currently amended) A high efficiency photovoltaic converter device for high luminous intensities manufactured using optoelectronic technology according to claim 18 wherein the design of its configuration: semiconductor structure of III-V compounds, ohmic contacts, geometry, metal grid and antireflection layers is calculated by means of multivariable optimization following [[the]] maximum efficiency criterion.